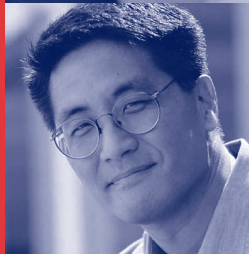


Quick Setup & User's Guide

Compaq iPAQ Desktop Personal Computer



COMPAQ

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Quick Setup & User's Guide

Compaq iPAQ Desktop Personal Computers

Second Edition (May 2001)

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Compaq Computer Corporation

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Specifications

Quick Setup

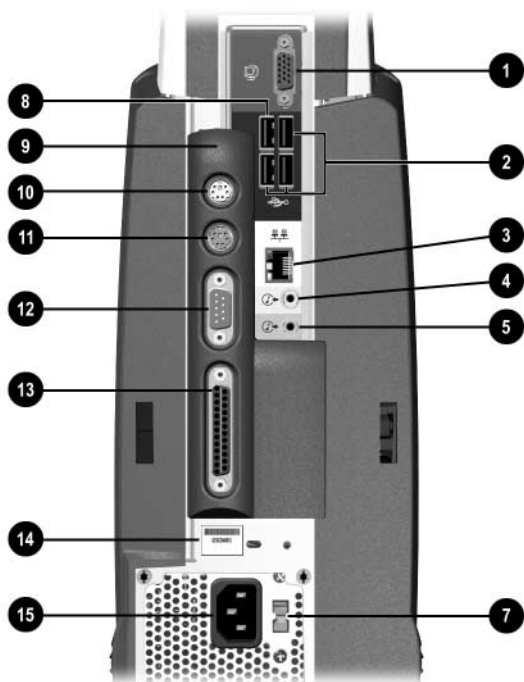
Step 1: Unpack the Compaq iPAQ Desktop Personal Computer



WARNING: Misuse of your Personal Computer or failure to establish a safe and comfortable workstation may result in discomfort or serious injury. Refer to your *Safety & Comfort Guide* for more information on choosing a workspace and creating a safe and comfortable work environment.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. For more information, refer to the *Compaq iPAQ Reference Library* CD. To reduce the risk of electrical shock, connect your Personal Computer only to a grounded (earthed) electrical outlet that is easily accessible at all times.

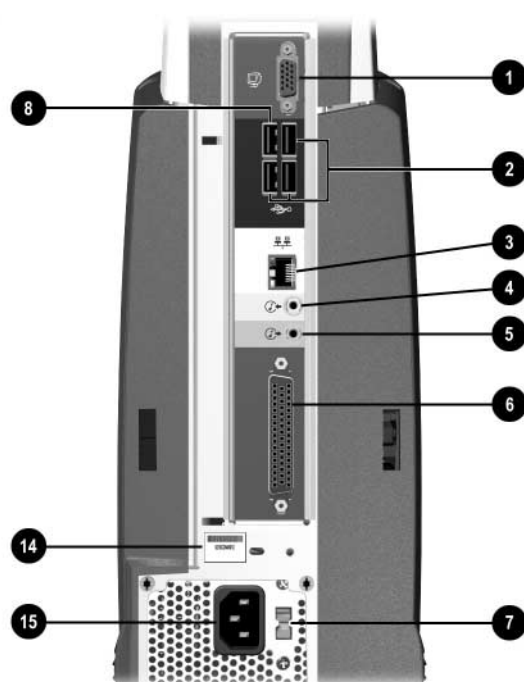
Step 2: Identify Rear Panel Components and Confirm Voltage Setting



iPAQ Desktop Personal Computer with Legacy Module Installed

- ❶ Monitor Connector
- ❷ Universal Serial Bus (USB) Connectors
- ❸ Ethernet RJ-45 Connector
- ❹ Line-Out Audio Connector
- ❺ Line-In Audio Connector
- ❻ Legacy Module Connector
- ❼ Voltage Select Switch

Set the voltage select switch to match the voltage of the power outlet to which the computer will be connected (115 VAC or 230 VAC).



iPAQ Legacy-Free Desktop Personal Computer

- ❸ Dedicated, Full-Speed USB Connector
- ❹ Legacy Module
- ❺ PS/2 Mouse Connector
- ❻ PS/2 Keyboard Connector
- ❼ Serial Connector
- ❽ Parallel Port Connector
- ❾ Serial Number
- ❿ Power Cord Connector

USB Connectors

The iPAQ Desktop Personal Computer features two internal USB controllers, each providing data transfer rates up to 12 megabits per second (Mbps). One of these controllers is dedicated exclusively to a new, full-speed Universal Serial Bus (USB) connector (shown on the previous page). The other five USB connectors share the second controller.

Any USB device (including keyboard and mouse) can be connected to **any** USB connector. However, Compaq recommends the use of the full-speed USB connector, with its dedicated 12Mbps controller, for devices such as scanners, digital cameras, external I/O devices, and printers that can utilize the additional speed for maximum performance.

Legacy Module



Microsoft Windows 98 and Windows NT 4.0 will not run properly if the Legacy Module is not installed or has been removed from the iPAQ Desktop Personal Computer. The Legacy Module is optional on systems running Microsoft Windows 2000 Professional or Microsoft Windows Millennium.

The Legacy Module (standard on select models) provides serial, parallel, PS/2 mouse, and PS/2 keyboard connectors. For more information, refer to chapter 5, “Using the Legacy Module.”

Step 3: Connect External Devices

Connect the monitor, mouse, and keyboard cables. If you use a network, connect the network cable to the Ethernet RJ-45 Connector. For easy setup, Compaq has color-coded the cables and rear panel connectors.



WARNING: To reduce the risk of electrical shock, fire, or damage to the equipment, do not plug telecommunications/telephone connections into the network interface controller (NIC) connectors.

PS/2 mouse and keyboard connectors are available only on iPAQ Desktop Personal Computers equipped with the Legacy Module. A USB mouse or keyboard may be connected to **any** of the available USB connectors; however, you may want to reserve the dedicated, full-speed USB connector for USB devices, such as digital cameras, scanners, or networking devices that demand the extra speed for enhanced performance.



CAUTION: Do not add additional, optional hardware devices to your Personal Computer until the operating system is successfully installed. Doing so may cause errors and may prevent the operating system from installing properly.

Step 4: Connect the Power Cords

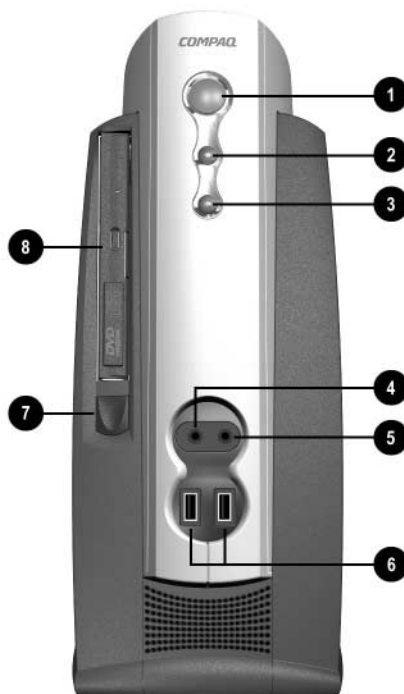
Connect the power cords as shown below.



WARNING: To reduce the risk of electric shock or damage to the equipment:

- Do not disable the power cord grounding plug. The grounding plug is an important safety feature.
 - Plug the power cord into a grounded (earthed) electrical outlet that is easily accessible at all times.
 - Disconnect power from the Personal Computer by unplugging the power cord from either the electrical outlet or the Personal Computer.
-

Step 5: Identify the Front Panel Components



- ❶ Dual-State Power Button
- ❷ Power-On Light
- ❸ System Activity Light
- ❹ Microphone Connector
- ❺ Headphone Connector
- ❻ Universal Serial Bus (USB) Connectors
- ❼ MultiBay Eject Button
- ❽ MultiBay

Step 6: Turn On the Personal Computer and Install the Operating System

Press the power button to turn on the personal computer. Refer to “Step 2: Identify Rear Panel Components and Confirm Voltage Setting” on page 2 for the location of the power button.

The first time you turn on the Personal Computer, the operating system is installed automatically. This process takes about 10 minutes, depending on which operating system is being installed. Carefully read and follow the instructions that appear on the screen to complete the installation.



CAUTION: Once the automatic installation has begun, DO NOT TURN OFF THE COMPUTER UNTIL THE PROCESS IS COMPLETE. Turning off the Personal Computer during the installation process might damage the software that runs the Personal Computer.

When the Welcome to Windows screen is displayed, the Windows installation process is complete.

Customizing the Monitor Display

You can manually select or change the monitor brand, model, refresh rates, color, resolution, and power management settings. Select the Display icon in the Windows Control Panel to change display settings, or refer to the online documentation provided with the graphics controller utility.

Protecting Your Software

To protect your software from loss or damage, you should keep a backup copy of all system software, applications, and related files stored on your hard drive. Refer to your operating system or backup utility documentation for instructions on making backup copies of your data files.

Compaq Restore CD

Along with the operating system CD, the *Compaq Restore CD* enables you to recover the original operating system, Internet browser, and NIC or modem drivers. This can be extremely helpful in the event of hard drive failure or corruption. Additional support software for specific models may be downloaded from www.compaq.com/support. To use the *Compaq Restore CD*, insert the CD into the CD-ROM drive and restart the computer. Carefully read and follow all instructions that appear on the screen.



CAUTION: To prevent loss of data, before using the Compaq Restore CD, be sure to back up any data files and software application files created or installed after unbundling the factory-installed software. The Restore CD will erase all files from the hard drive before restoring the original operating system, Internet browser, and NIC or modem drivers.



You may need to use the keyboard to make selections during the system restore process. USB mouse support is not available until USB mouse drivers have been restored.

For questions about or problems with this CD, please contact Compaq customer service.

Registration

Be sure to register your new personal computer with Compaq. Registration establishes a record of ownership and gives you an opportunity to receive product announcements, updates, and other communications periodically, if you choose to do so. Registration is easy—just visit the Compaq Web site at www.compaq.com/register and follow the instructions that appear on the screen.

Turning Off the Personal Computer

To properly turn off the personal computer, first shut down the operating system software. In Microsoft Windows operating systems, click Start > Shut Down.

In Windows NT Workstation 4.0, the power button always functions as a power switch. However, in the default configuration of Windows 98, Windows 2000 Professional, or Windows Millenium, pressing the power button does not turn off the power, but causes the Personal Computer to enter a low-power state. This allows you to conserve energy without closing software applications; later, you can start using the computer immediately, without having to restart the operating system and without any data loss.



If the power button is pressed and held in for four seconds, power to the Personal Computer will turn off completely. To reconfigure the power button to work in On/Off mode, run Computer Setup. Refer to the “Computer Setup Utilities (F10 Setup)” section of the *Troubleshooting Guide* for more information on using Computer Setup.

chapter 1

Working with the Compaq Easy Access Keyboard

In addition to the standard keyboard keys, the Compaq Easy Access Keyboard offers eight Easy Access Buttons that make accessing your favorite Web sites, services, and applications easier and faster.



Easy Access Keyboard

Programming the Easy Access Buttons

All Easy Access Buttons can be reprogrammed to open any software application or data file on your hard drive, or any Internet address.

An Internet address, also referred to as a Uniform Resource Locator (URL), is simply a pointer to a Web page, file, image, newsgroup, or other resource available on the Internet. It is very similar to the path and file name used to point to a file on the Personal Computer's hard drive. For example, the URL that points to the Compaq Web site is <http://www.compaq.com>.

To reprogram your Easy Access Buttons, complete the following steps:

1. Click the Easy Access Button icon located in the status area (lower right corner) of the Windows taskbar.

The Easy Access Button dialog is displayed.

2. On the dialog, click the icon representing the Easy Access Button you want to program.
3. Type the new command or URL you want to assign to the button, or drag an Internet link or software application shortcut onto the button icon.
4. Click OK when you are finished.

You can customize the Easy Access Button labels on the keyboard, using the paper insert template document. The document is installed, by default, under C:\Program files\Compaq\Easy Access Keyboard\.

chapter 2

Working with the MultiBay

The MultiBay is located on the left side of the iPAQ Desktop Personal Computer. It is a special drive bay that supports a variety of optional 12.7-mm removable drives, including:

- MultiBay 24X Max CD-ROM Drive
- MultiBay 8X DVD-ROM Drive with Software MPEG-2
- MultiBay SuperDisk LS-120 Drive
- MultiBay Zip 250 Drive
- MultiBay CD-RW Drive
- MultiBay SMART Hard Drive

These drives may also be used with the MultiBay on Compaq Armada Notebook PCs.



CAUTION: To prevent loss of work and damage to the Personal Computer or a drive:

- If you are inserting or removing a hard drive, exit all software applications, shut down the operating system software, and turn off the Personal Computer. Do not remove a hard drive while the Personal Computer is on or in standby mode.
 - Before handling a drive, ensure that you are discharged of static electricity. While handling a drive, avoid touching the connector. For more information about preventing electrostatic damage, see the *Troubleshooting Guide*.
 - Before traveling with, shipping, storing, or removing a drive other than a hard drive, make sure that no media, such as a diskette, CD-ROM, or DVD-ROM, is in the drive and that the media tray is closed.
 - Handle a drive carefully; do not drop it.
 - Do not use excessive force when inserting a drive.
 - Avoid exposing a hard drive to liquids, temperature extremes, or products that have magnetic fields such as monitors or speakers.
 - If a drive must be mailed, place the drive in a bubble-pack mailer or other suitable protective packaging and label the package "Fragile: Handle with Care."
-

“Hot-Plugging” or “Hot-Swapping” MultiBay Drives



CAUTION: To prevent damage to the Personal Computer, the drive, and any data stored on the drive:

- If you are inserting or removing a hard drive, shut down the Personal Computer. Never remove a hard drive while the Personal Computer is on or in Standby. To ensure that the Personal Computer is not in Standby, turn the Personal Computer on, then shut it down.
- If the Personal Computer is running a retail version of Windows 98 or Windows NT 4.0 without software enhancements from Compaq, shut down the Internet Device before inserting or removing any drive.

If the Personal Computer is running a preinstalled operating system supplied by Compaq, you can insert or remove any drive except a hard drive while the Personal Computer is on, off, or in Standby.

If the Personal Computer is running a retail version of Windows 98 or Windows NT 4.0, you can obtain software enhancements from Compaq that will enable you to insert or remove any drive except a hard drive without first shutting down the Personal Computer.



The retail version of Windows 2000 supports this feature without additional software enhancements.

To obtain these enhancements, go to the Compaq Internet site at www.compaq.com.

Partitioning and Formatting a MultiBay Hard Drive

1. Exit all software applications, shut down the operating system software, and turn off the Personal Computer.
2. Insert the hard drive into the MultiBay as shown in the following section.
3. Turn on the Personal Computer. Follow directions for your operating system, below:

Windows 98 and Windows Millennium (FDISK)

1. From MS-DOS command prompt, type FDISK and press the Enter key.
2. Select Y to enable large drive support (FAT32).
3. Select option 5, then select drive 2.
4. Select 1-Create DOS Partition.
5. Select 1-Create Primary DOS Partition.
6. Select Y for maximum size, then restart the Personal Computer.
7. From Windows, double-click the My computer icon, then right click on the drive letter designating the Multibay drive.
8. Select format and perform a full format.

Windows 2000 and Windows NT 4.0 (Disk Administrator)

1. Run Disk Administrator.
 - Under Windows 2000, right-click the My Computer icon, then click Manage > Disk Management.
 - Under Windows NT, click Start > Programs > Administrative Tools > Disk Administrator.
2. Select the MultiBay hard drive.
3. On the Partition menu, click Create. Carefully read and respond to any prompts that appear on the screen.

Refer to the Disk Administrator online Help for additional information.

Inserting a Drive into the MultiBay



If the Personal Computer did not ship with a MultiBay drive, there will be a drive blank in the MultiBay. Refer to "Removing a Drive from the MultiBay" on page 5 for instructions on removing the drive blank.

1. Exit all software applications, shut down the operating system software, and turn off the Personal Computer if
 - You are inserting or removing a hard drive.
 - The Personal Computer is running a retail version of Windows 98 or Windows NT 4.0 without software enhancements from Compaq.
2. Remove any removable media, such as a compact disc, from the drive.

3. With the top of the drive facing left and the drive connector facing the Personal Computer, slide the drive into the MultiBay and push firmly to ensure that the electrical connector is properly seated.



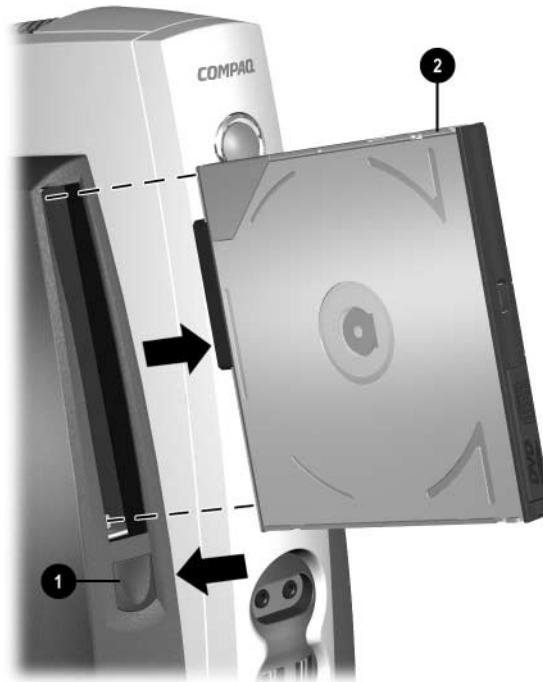
Inserting a Drive into the MultiBay

If the device does not start, ensure that the necessary device drivers are installed on the system. If they are not available, they may be downloaded, at no cost, from the Compaq Web site at www.compaq.com.

Removing a Drive from the MultiBay

1. Exit all software applications, shut down the operating system software, and turn off the Personal Computer if
 - You are inserting or removing a hard drive.
 - The Personal Computer is running a retail version of Windows 98 or Windows NT 4.0 without software enhancements from Compaq.
2. Remove the iPAQ Desktop Security Bar, if it has been installed so as to disable the MultiBay eject button **1**. Refer to “Uninstalling the iPAQ Desktop Security Bar” on page 3-1.

3. Firmly press and hold the eject button ❶ to eject the drive from the MultiBay.



If the Personal Computer did not ship with a drive in the MultiBay, there will be a drive blank in the MultiBay. Follow the above procedure to remove it before inserting a MultiBay drive.

chapter 3

Adding System Memory and Upgrading the Internal Hard Drive

General Precautions

Before adding system memory or upgrading the hard drive be sure to carefully read all of the applicable instructions, cautions, and warnings in this guide.



WARNING: To reduce the risk of personal injury from electrical shock and/or hot surfaces, be sure to disconnect the power cord from the wall outlet, and allow the internal system components to cool before touching.



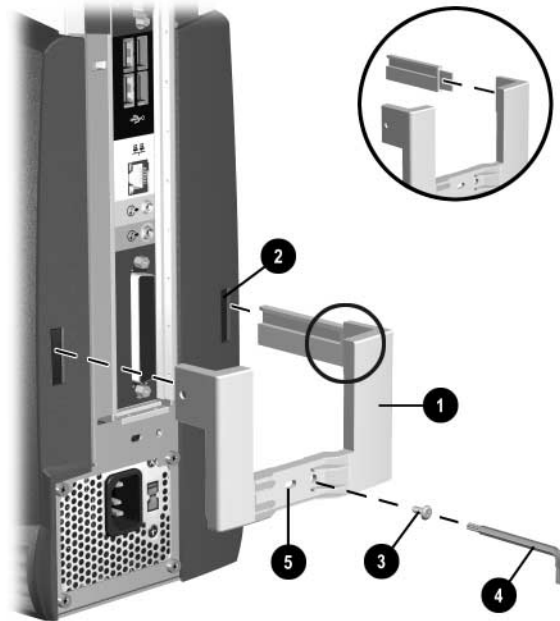
CAUTION: Static electricity can damage the electronic components of the Personal Computer or optional equipment. Before beginning these procedures, ensure that you are discharged of static electricity by briefly touching a grounded metal object. Refer to “Electrostatic Discharge” in the *Troubleshooting Guide* for more information.

Uninstalling the iPAQ Desktop Security Bar

When installed, the iPAQ Desktop Security Bar protects the memory modules and internal hard drive by preventing removal of the side covers. It also secures the Legacy Module (if installed). Depending upon how it is installed, the Security Bar can also disable the MultiBay eject button, so that a drive installed in the MultiBay cannot be removed. Refer to “Installing the iPAQ Desktop Security Bar” on page 6-12.

To remove the side panels or Legacy Module, you must first remove the security bar, if installed.

Using the Torx screwdriver ❹ (provided), remove the tamper-proof Torx screw ❸ and pull the security bar ❶ away from the personal computer.



Uninstalling the iPAQ Desktop Security Bar

Removing and Replacing the Side Access Panels

To access system memory or the internal hard drive, you must remove the side access panel as shown below:

1. Exit all software applications, shut down the operating system software, turn off the Personal Computer and any external devices, then disconnect the power cord from the power outlet.
2. Uninstall the iPAQ Desktop Security Bar, if installed. Refer to “Uninstalling the iPAQ Desktop Security Bar” on page 3-1.

3. Press down on the ribbed middle section at the top of the access panel ❶, then pivot and lift the access panel from the Personal Computer.
4. To replace the access panel, ensure that it is aligned on the two tabs on the base of the Compaq iPAQ ❷, then pivot it up and toward the Personal Computer until it locks into place.



Removing the Right Side Access Panel

Adding System Memory

The memory sockets on the personal computer can be populated with industry-standard DIMMs. These memory module slots are populated with at least one preinstalled memory module. To achieve the maximum memory support, you may be required to replace the preinstalled DIMM with a higher capacity DIMM.

For proper system operation, the DIMMs must be industry-standard 168-pin, 100 MHz, unbuffered, PC100-compliant SDRAM DIMMs, or 133 MHz, unbuffered, PC133-compliant SDRAM DIMMs. If two DIMMs are installed, they must be the same speed. This computer comes equipped with 133 MHz DIMMs.

The SDRAM DIMMs must support CAS Latency 2 or 3 (CL = 2 or CL = 3). They must also contain the mandatory Joint Electronic Device Engineering Council (JEDEC) Serial Presence Detect (SPD) information. DIMMs constructed with x4 SDRAM are not supported; the system will not start when equipped with unsupported DIMMs.

Adding or Removing a Memory Module



CAUTION: Your memory module sockets have gold-plated metal contacts. When upgrading your memory, it is important to use memory modules with gold-plated metal contacts to prevent corrosion and/or oxidation resulting from having incompatible metals in contact with each other.

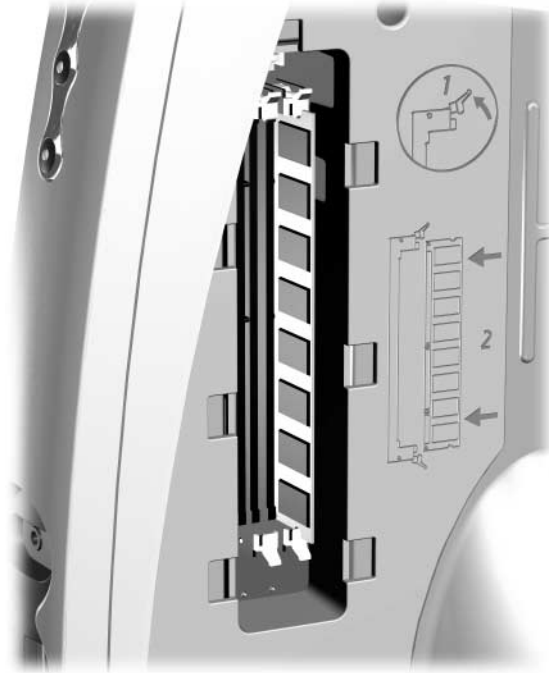


CAUTION: Static electricity can damage the electronic components of the Personal Computer. Before beginning these procedures, ensure that you are discharged of static electricity by briefly touching a grounded metal object. Refer to “Electrostatic Discharge” in the *Troubleshooting Guide* for more information.



CAUTION: When handling a memory module, be careful not to touch any of the contacts. Doing so may damage the module.

1. Exit all software applications, shut down the operating system software, turn off the Personal Computer and any external devices, then disconnect the power cord from the power outlet.
2. Remove the right access panel. Refer to “Removing and Replacing the Side Access Panels” on page 3-2.

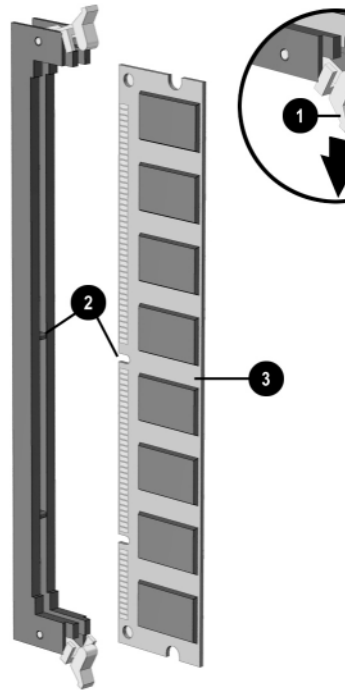


Accessing the DIMM Slots



WARNING: To reduce the risk of personal injury from hot surfaces, allow the internal system components to cool before touching.

3. To remove a module, press out on both latches of the DIMM socket at the same time. This releases the module and partially pushes it out of the socket.
4. Lift the module from the socket.



Adding or Removing Memory Modules

5. To install a memory module, press out on both latches of the DIMM socket at the same time ❶. Match the notch on the module with the tab on the memory socket ❷. **Firmly** push the module straight into the socket, ensuring that the module is fully inserted and properly seated ❸. The latches will close automatically when the module is seated correctly, securing the module in the slot.



If only one memory module is used in the system, it must be installed in the same socket that held the preinstalled memory module.

6. Replace the right access panel.

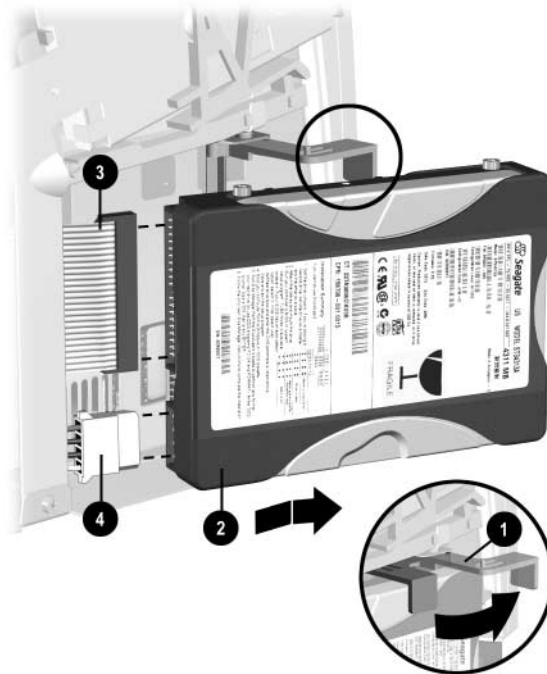


When the Personal Computer starts up, it will recognize the system memory upgrade and automatically reconfigure the system.

Upgrading the Primary Hard Drive

The primary hard drive is a 3.5-inch hard drive located on the left side of the Personal Computer, under the MultiBay.

1. Exit all software applications, shut down the operating system software, turn off the Personal Computer and any external devices, then disconnect the power cord from the power outlet.
2. Remove the left access panel. Refer to “Removing and Replacing the Side Access Panels” on page 3-2.



Removing the Internal Hard Drive

3. Pull the release lever **1** toward the front of the personal computer.
4. Slide the drive **2** forward and away from the personal computer.
5. Disconnect the flat ribbon data cable **3** from the hard drive by pulling up on the green tab on the cable end.

6. Disconnect the power cable ④ from the hard drive by pulling up on the connector.



When removing the signal cable, pull on the tab instead of the cable itself. This will help prevent cable damage.

chapter 4

Accessing the Internet & Using Network Communications

Accessing the Internet

Using the Optional USB Modem

If you do not have a network connection to the Internet, you will need an Internet service provider and an external USB modem, available from Compaq. Refer to the documentation included with the modem for instructions on installing, configuring, and using the modem.

Choosing an Internet Service Provider

An Internet service provider (ISP) gives you the dial-up (telephone networking) access and software you need to connect to the Internet. Most ISPs also offer E-mail, access to newsgroups, space to create Web pages, and technical support. Some ISPs offer commercial services, such as domain hosting, to companies and individuals wanting to do business on the Internet. You can choose from local and national ISPs.

An online service provider, such as The Microsoft Network (MSN) or America Online (AOL), offers special features, content, and technical support in addition to providing access to the Internet. An online service provider may provide a categorized or customizable home page that makes it easy for you to find some of the most popular and useful sites on the Internet.

To find the provider that's right for you:

- Look in the Yellow Pages
- Ask a friend or colleague for recommendations
- If you have access to the Internet already, you can use a search engine, such as AltaVista, to help you locate an ISP or online service provider.

ISPs typically offer a variety of service plans for different customers' needs. Be sure to review and compare plans, services offered, and price to find the provider that is right for you and your needs.

Using Network Communications

The personal computer comes with an integrated network interface controller (NIC) and network device drivers.

NIC-Based Alerts

NIC-based alert support allows a system administrator to remotely monitor personal computers and Personal Computers over the network. The Personal Computer can send hardware and operating system failure alerts over the network before the operating system is loaded or when the Personal Computer is powered off. Alerts may include:

- system BIOS hang
- operating system hang
- processor missing
- operating temperature exceeded

Remote Wakeup Support

Remote Wakeup support allows the system administrator to turn on power to a client computer or Personal Computer from a remote location, through the use of supported PC LAN management tools.



Remote Wakeup support is available only when using an RJ-45 network connection.

Refer to “Remote Wakeup and Remote Shutdown” on page 20, or to the online *Remote Management Administrators Guide*. The *Remote Management Administrators Guide* is included with the Remote Management Setup Utilities, and is available on the Support Software CD for Compaq Desktop, Portable, and Workstation Products or at the Compaq Web Site a www.compaq.com.

Interpreting the Network Status Lights

The integrated NIC includes network status lights:

- The link/activity light illuminates when the system is physically connected to an active network light and blinks when the Personal Computer detects network activity. When the system is connected to a highly used network, the activity light will remain on almost constantly.
- The 100TX light illuminates during 100-Mbps operation.

If Remote Wakeup is enabled, the link/activity light will remain functional even when power to the Personal Computer is turned off.

Disabling the Autosensing Capabilities

Autosensing NICs automatically determine the maximum network operating speed of the attached network and configure themselves accordingly. The Personal Computer begins autosensing whenever it loses a valid network link, for example, if the cable is disconnected.

In addition to determining the network operating speed, the Personal Computer determines if full-duplex is supported. Full-duplex systems can transmit and receive information on the network simultaneously. Half-duplex systems cannot transmit and receive simultaneously.

If necessary, you can disable the autosensing capabilities and force the system to operate in one mode only.

1. Select the Network icon, located in the Control Panel.
2. Select the appropriate NIC in the list box and click Properties.
3. Change the Speed and Duplex values from Automatic/Auto Duplex to the appropriate values, depending on the capabilities of your network.
4. Exit the Network control application. You will be prompted to restart Personal Computer in order for the changes to take effect.



100Base-TX operation requires the use of Category 5 UTP cable with an RJ-45 network connection.

Installing Network Drivers

The device drivers in the network software enable the Personal Computer to communicate with the network.



Device drivers are supplied for the Microsoft Windows NT version 4.0 and Windows 95, Windows 98, or Windows 2000 operating systems, depending on which system was preinstalled on the Personal Computer. If you are using another operating system, device drivers may be installed from diskettes included with the network operating system or are available from Compaq. If reinstallation of the operating system ever becomes necessary, use the Compaq Restore CD.

chapter 5

Using the Legacy Module

The optional Legacy Module (standard on select models) provides connectors for serial and parallel devices, PS/2 mouse, and PS/2 keyboard.



Microsoft Windows 98 and Windows NT 4.0 will not run properly if the Legacy Module is not installed or has been removed from the iPAQ Desktop Personal Computer. The Legacy Module is optional on systems running Microsoft Windows 2000 Professional or Microsoft Windows Millenium.

Connect the Legacy Module to the Legacy Module connector on the rear panel, as shown.



If the iPAQ Desktop Security Bar is installed, you must uninstall it prior to removing the Legacy Module. Refer to “Uninstalling the iPAQ Desktop Security Bar” on page 3-1.

chapter 6

Desktop Management

COMPAQ pioneered desktop manageability in 1995 with the introduction of the industry's first fully manageable desktop personal computers. Since then, Compaq has led an industry-wide effort to develop the standards and infrastructure required to effectively deploy, configure, and manage desktop PCs. Compaq Intelligent Manageability provides standards-based solutions for managing and controlling desktops in a networked environment. Compaq works closely with leading management software solution providers in the industry to ensure compatibility between Intelligent Manageability and these products. Intelligent Manageability is an important aspect of our broad commitment to providing you with PC Lifecycle Solutions that assist you during the four phases of the desktop PC lifecycle—planning, deployment, management, and transitions.

This guide summarizes the capabilities and features of the four key components of desktop management:

- Initial Configuration and Deployment
- Asset tracking and security
- Fault notification and recovery
- Software updating and management

The guide also contains an overview of the tools, utilities, and information Compaq provides to help you successfully deploy manageable desktop PCs.



Support for specific features described in this guide may vary by model or software version.

Initial Configuration and Deployment

Compaq personal computers come with a preinstalled system software image. After a very brief software “unbundling” process, the personal computer is ready to be used.

- Installing additional software applications after unbundling the preinstalled software image
- Using software deployment tools, such as Microsoft MS Batch or NT Distribution Share (NTDS), or Altiris eXpress to replace the preinstalled software with a customized software image
- Using a disk cloning process to copy the contents from one hard drive to another

The best deployment method depends on your information technology environment and processes. The PC Deployment section of the Solutions and Services Web site (www.compaq.com/im/change) provides information to help you select the best deployment method. You'll also find guides and utilities to integrate with Microsoft or PXE-based deployment tools.

Remote System Installation

Remote System Installation allows you to start and set up your system using the software and configuration information located on a network server. The Remote System Installation feature is usually used as a system setup and configuration tool, and can be used for the following tasks:

- Deploying a software image on one or more new PCs.
- Formatting a hard drive.
- Installing application software or drivers.
- Updating the operating system, application software, or drivers.

To initiate Remote System Installation, press F12 when the F12=Network Service Boot message appears in the lower-right corner of the Compaq logo screen. Follow the instructions on the screen to continue the process.

Compaq and Altiris, Inc. have partnered to provide tools designed to make the task of corporate PC deployment and management easier and less time-consuming, ultimately lowering the total cost of ownership and making Compaq PCs the most manageable client PCs in the enterprise environment.

Altiris eXpress

Altiris eXpress allows the system administrator to create and quickly deploy a customized, corporate-standard software image across one or more networked client PCs with an interface as simple to use as Windows Explorer. Altiris eXpress supports Intel's Wired for Management and Preboot Execution Environment (PXE). Using Altiris eXpress and the Remote System Installation features of the personal computer, there is no need for the system administrator to visit each new PC individually to deploy the software image.

For more information, refer to the Compaq Web site at www.compaq.com.

PC Transplant

PC Transplant, designed to assist you in personalizing the new PC, can be downloaded free from the Compaq Web site. It lets you preserve the “personality”—the customized settings such as Start menu entries, drive and printer mappings, software application options, and so on—of an existing PC, then transfer those unique settings to the new Compaq PC so that you don't have to invest valuable time manually recreating them.

For more information, refer to the Compaq Web site at www.compaq.com.

Asset Tracking and Security

Compaq AssetControl features incorporated into the Personal Computer provide key asset tracking data that can be managed using Compaq Insight Manager products and Management Solutions Partners products. Seamless, automatic integration between AssetControl features and these products enables you to choose the management tool that is best suited to your environment and to leverage your investment in existing tools.

Compaq Personal Computers are manufactured with the hardware and firmware required to fully support the DMI 2.0 standard.

Compaq also offers several solutions for controlling access to valuable Personal Computer components and information. Security features such as the Memory Change alert, power-on password, and setup password help to prevent unauthorized access to the internal components of the Personal Computer. By disabling parallel, serial, or USB ports, or by disabling removable media boot capability, you can protect valuable data assets. Memory Change alerts can be automatically forwarded to Compaq Insight Manager products to deliver proactive notification of tampering with the internal components of the Personal Computer.

There are three ways to manage security settings on your Compaq Personal Computers:

- Locally, using the Compaq Computer Setup Utilities. See the “Computer Setup Utilities (F10 Setup)” section of the *Troubleshooting Guide* for more information and instructions.
- Remotely, using the Compaq Remote Security Management software. This software enables the secure, consistent deployment and control of security settings from a central point on the network using a third-party PC LAN management application such as Microsoft SMS.
- Remotely, using Compaq Insight Manager LC, a tool for managing PC workgroups.

The following table and sections refer to managing security features of your Computer locally through the Compaq Computer Setup Utilities. Refer to the Remote Management Setup Utilities for more information on using the Remote Security Management software. These utilities are available on the Compaq Web site at www.compaq.com/support/files/index.html. For more information on Insight Manager LC, refer to www.compaq.com/im/lc.

Security Features Overview

Feature	Purpose	How It Is Established
Removable Media Boot Control	Prevents booting from the removable media drives.	From the Compaq Computer Setup Utilities menu. For more information about Computer Setup, see the <i>Troubleshooting Guide</i> .
Serial, Parallel, or USB Interface Control	Prevents transfer of data through the integrated serial, parallel, or USB (universal serial bus) interface.	From the Compaq Computer Setup Utilities menu. For more information about Computer Setup, see the <i>Troubleshooting Guide</i> .
Power-On Password	Prevents use of the Personal Computer until the password is entered. This can apply to both initial system startup and restarts.	From the Compaq Computer Setup Utilities menu. For more information about Computer Setup, see the <i>Troubleshooting Guide</i> .
Setup Password	Prevents reconfiguration of the Personal Computer (use of the Computer Setup Utilities) until the password is entered.	From the Compaq Computer Setup Utilities menu. For more information about Computer Setup, see the <i>Troubleshooting Guide</i> .
DriveLock Security	Allows a MultiBay hard drive to be locked, preventing unauthorized access to data stored on the drive.	From the Compaq Computer Setup Utilities menu. For more information about Computer Setup, see the <i>Troubleshooting Guide</i> . CAUTION: A MultiBay hard drive can be rendered permanently unusable if the DriveLock security feature is enabled and the password is forgotten. Refer to “Enabling or Disabling DriveLock on a MultiBay Hard Drive” on page 10 prior to using the DriveLock security feature.
Memory Change Alerts	Detects when memory modules have been added, moved, or removed; notifies end-user and system administrator.	For information on enabling Memory Change Alerts, refer to the online <i>Intelligent Manageability Guide</i> .

Security Features Overview *(Continued)*

Feature	Purpose	How It Is Established
Ownership Tag	Displays ownership information, as defined by the system administrator, during system startup (protected by setup password).	From the Compaq Computer Setup Utilities menu.
iPAQ Desktop Security Bar	Prevents removal of the side panels to protect the internal hard drive and memory modules. Also secures the Legacy Module, if installed. Depending upon how it is installed, disables the MultiBay eject button to prevent removal of a MultiBay drive.	Refer to "Installing the iPAQ Desktop Security Bar" on page 12 for detailed information.
Cable Lock Provision	Used in conjunction with an optional cable lock to secure the Personal Computer to a fixed object to prevent theft.	Refer to "Installing a Compaq Security Lock" on page 14 for detailed information.
Mounting Holes	Holes in the base of the chassis allow the personal computer to be bolted to a fixed surface.	Refer to "Securing the iPAQ to a Fixed Work Surface" on page 13 for detailed information.

Password Security

This Personal Computer supports several password security features—a setup password, a power-on password, and a password to lock a MultiBay hard drive. The power-on password prevents unauthorized use of the Personal Computer by requiring entry of a password to access applications or data each time the Personal Computer is turned on or restarted. The setup password specifically prevents unauthorized access to Computer Setup, and can also be used as an override to the power-on password. That is, when prompted for the power-on password, entering the setup password instead will allow access to the Personal Computer.

A network-wide setup password can be established to enable the system administrator to log in to all network systems to perform maintenance without having to know the power-on password, even if one has been established.

The DriveLock feature prevents unauthorized access to data stored on MultiBay hard drives.

Establishing a Setup Password Using Computer Setup

Establishing a setup password through Computer Setup prevents reconfiguration of the Personal Computer (use of the Computer Setup utility) until the password is entered.

1. Turn on or restart the Personal Computer. If you are in Windows, click Start > Shut Down > Restart the Computer.
2. When the F10 Setup message appears in the lower-right corner of the screen, press the F10 key. Press Enter to bypass the title screen, if necessary.

If you do not press the F10 key while the message is displayed, you must restart the Personal Computer again to access the utility.

3. Select Security, then select Setup Password and follow the instructions on the screen.
4. Before exiting, click File > Save Changes and Exit.

Establishing a Power-On Password Using Computer Setup

Establishing a power-on password through Computer Setup prevents access to the Personal Computer when power is turned on, unless the password is entered. The password must be entered each time the Personal Computer is turned on, when the key icon appears on the monitor.

1. Turn on or restart the Personal Computer. If you are in Windows, click Start > Shut Down > Restart the Computer.
2. When the F10 Setup message appears in the lower-right corner of the screen, press the F10 key. Press Enter to bypass the title screen, if necessary.

If you do not press the F10 key while the message is displayed, you must restart the Personal Computer again to access the utility.

3. Select Security, then Power-On Password and follow the instructions on the screen.
4. Before exiting, click File > Save Changes and Exit.

Entering a Power-On Password

To enter a power-on password, complete the following steps:

1. Turn on or restart the Personal Computer. If you are in Windows, click Start > Shut Down > Restart the Computer.
2. When the key icon appears on the monitor, type your current password, then press the Enter key.

Type carefully; for security reasons, the characters you type do not appear on the screen.

If you enter the password incorrectly, a broken key icon appears. Try again. After three unsuccessful tries, you must turn off the Personal Computer, then turn it on again before you can continue.

Entering a Setup Password

If a setup password has been established on the Personal Computer, you will be prompted to enter it each time you run Computer Setup.

1. Turn on or restart the Personal Computer. If you are in Windows, click Start > Shut Down > Restart the Computer.
2. When the F10=Setup message appears in the lower-right corner of the screen, press the F10 key.

If you do not press the F10 key while the message is displayed, you must restart the Personal Computer again to access the utility.

3. When the key icon appears on the monitor, type the setup password, then press the Enter key.

Type carefully; for security reasons, the characters you type do not appear on the screen.

If you enter the password incorrectly, a broken key icon appears. Try again. After two unsuccessful tries, the system will restart, but you will be unable to access the Computer Setup utilities.

Changing a Power-On or Setup Password

1. Turn on or restart the Personal Computer. If you are in Windows, click Start > Shut Down > Restart the Computer. To change the setup password, run Computer Setup.
2. When the key icon appears, type your current password, a slash (/) or alternate delimiter character, your new password, another slash (/) or alternate delimiter character, and your new password again as shown:

current password/new password/new password

Type carefully; for security reasons, the characters you type do not appear on the screen.

3. Press the Enter key.

The new password takes effect the next time you turn on the Personal Computer.



Refer to “National Keyboard Delimiter Characters” on page 12 for information about the alternate delimiter characters.

The power-on password and setup password may also be changed using the Security options in Computer Setup.

Deleting a Power-On or Setup Password

1. Turn on or restart the Personal Computer. If you are in Windows, click Start > Shut Down > Restart the Computer. To delete the setup password, run Computer Setup.
2. When the key icon appears, type your current password followed by a slash (/) or alternate delimiter character as shown:

current password/

3. Press the Enter key.



Refer to “National Keyboard Delimiter Characters” on page 12 for information about the alternate delimiter characters.

The power-on password and setup password may also be changed using the Security options in Computer Setup.

Enabling or Disabling DriveLock on a MultiBay Hard Drive



CAUTION: A MultiBay hard drive can be rendered permanently unusable if the DriveLock security feature is enabled and the password is forgotten.

If the drive is shared with others or regularly used in multiple Personal Computers or locations, the Master password should be set and used by the owner of the drive or by the System Administrator to avoid rendering the drive unusable if the User password is forgotten. The risk of rendering a drive permanently inaccessible is reduced when the Master password and the User password are set and maintained separately.

To prevent unauthorized access to Computer Setup, establish a Setup password.

1. With the MultiBay hard drive installed, turn on or restart the Personal Computer. If you are in Windows, click Start > Shut Down > Restart the Computer.
2. When the F10=Setup message appears in the lower-right corner of the screen, press the F10 key. Press Enter to bypass the title screen, if necessary.

If you do not press the F10 key while the message is displayed, you must restart the Personal Computer again to access the utility.

3. Select Security, then select DriveLock Security. You will be prompted to select a drive from a list of drives in the system that support the DriveLock security feature.
 - To allow another user to enable DriveLock, yet ensure that you can always unlock the drive, set the Master password.
 - To enable DriveLock, click Enable DriveLock and enter a User password when prompted to do so.
 - To disable DriveLock, click Disable DriveLock. The user password is cleared and must be reset next time DriveLock is enabled.
4. Before exiting, click File > Save Changes and Exit.

Entering a DriveLock Password on a MultiBay Hard Drive

When DriveLock is enabled, the DriveLock User or Master password must be entered to unlock the drive. To enter a DriveLock password, complete the following steps:

1. Turn on or restart the Personal Computer. If you are in Windows, click Start > Shut Down > Restart the Computer.
2. When the DiveLock key icon appears on the monitor, type your Master or User password, then press the Enter key.

Type carefully; for security reasons, the characters you type do not appear on the screen. If you enter the password incorrectly, a broken key icon appears. Try again. After two unsuccessful tries, POST will continue without unlocking the drive. You will have to restart the Personal Computer and correctly enter the password before you can access the drive.

Changing a DriveLock Password on a MultiBay Hard Drive

1. Turn on or restart the Personal Computer. If you are in Windows, click Start > Shut Down > Restart the Computer.
2. When the key icon appears, type your current password, a slash (/) or alternate delimiter character, your new password, another slash (/) or alternate delimiter character, and your new password again as shown:

current password/new password/new password

Type carefully; for security reasons, the characters you type do not appear on the screen.

3. Press the Enter key.

The new password takes effect the next time you turn on the Personal Computer.



Refer to “National Keyboard Delimiter Characters” on page 12 for information about the alternate delimiter characters.

The power-on password and setup password may also be changed using the Security options in Computer Setup. The Master password can only be changed in Setup if it was used to unlock the device during POST.

National Keyboard Delimiter Characters

Each keyboard is designed to meet country-specific requirements. The syntax and keys that you use for changing or deleting your password depend on the keyboard that came with your Personal Computer.

National Keyboard Delimiter Characters

Arabic	/	Greek	-	Russian	/
Belgian	=	Hebrew	.	Slovakian	-
BHCSY*	-	Hungarian	-	Spanish	-
Brazilian	/	Italian	-	Swedish/Finnish	/
Chinese	/	Japanese	/	Swiss	-
Czech	-	Korean	/	Taiwanese	/
Danish	-	Latin American	-	Thai	/
French	!	Norwegian	-	Turkish	.
French Canadian	é	Polish	-	U.K. English	/
German	-	Portuguese	-	U.S. English	/

* For Bosnia-Herzegovina, Croatia, Slovenia, and Yugoslavia

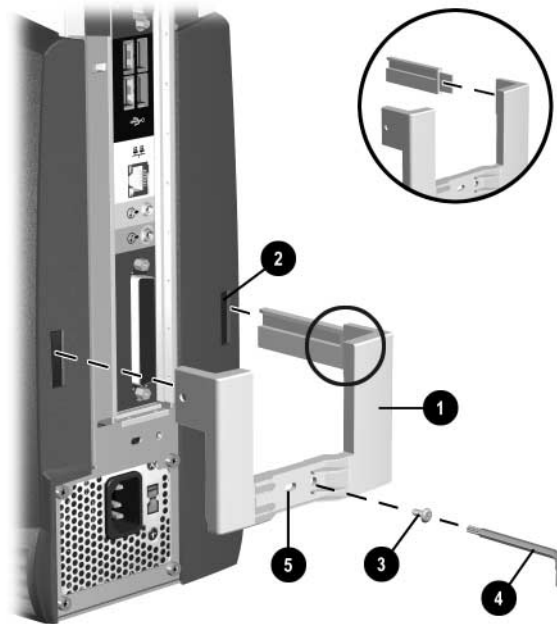
Clearing Passwords

If you forget your password, you cannot access the Personal Computer. Refer to the *Troubleshooting Guide* for instructions on clearing passwords.

Installing the iPAQ Desktop Security Bar

When installed, the iPAQ Desktop Security Bar protects the memory modules and internal hard drive by preventing removal of the side covers Personal Computer. It also secures the Legacy Module (if installed). Depending upon how it is installed, the Security Bar can also disable the MultiBay eject button, so that a drive installed in the MultiBay cannot be removed. The Security Bar is affixed to the personal computer with either a tamper-proof Torx screw or with the optional Compaq Security Lock.

1. Insert the posts **1** on the Security Bar into the openings **2** on the rear of the side panels.



Installing the iPAQ Desktop Security Bar



If the metal extension (provided with the Security Bar) is inserted into the post that goes into the **right** rear hole on the personal computer, the MultiBay eject button will be disabled. A drive installed in the MultiBay cannot be removed until the Security Bar is removed.

The Security Bar may vary slightly from the one shown in the illustration above.

2. Install the tamper-proof Torx screw **3** with the small screwdriver **4** to lock the Security Bar onto the Personal Computer. The Security Bar features a cable lock provision **5** for an optional cable lock. For more information, refer to “Installing a Compaq Security Lock” on page 14.

Securing the iPAQ to a Fixed Work Surface

Holes in the base of the personal computer allow you to bolt it to a desk or other fixed surface.

Installing a Compaq Security Lock

The rear panel of the personal computer features a cable lock provision that accommodates the optional Compaq Security Lock, so that the Personal Computer can be physically secured to a work area. If the Security Bar is installed, the Compaq Security Lock can be used to secure it to the Personal Computer, as well.

1. Loop the cable around a heavy, fixed object to which you want to secure the computer.
2. Insert the locking end of the cable through the loop end of the cable.

3. Insert the lock into the cable lock provision on the rear of the computer and lock it with the key.



Installing a Cable Lock

Fingerprint Identification Technology

Eliminating the need to enter end-user passwords, Compaq Fingerprint Identification Technology tightens network security, simplifies the login process, and reduces the costs associated with managing corporate networks. Affordably priced and supported by the Compaq iPAQ Desktop Personal Computer, it isn't just for high-tech, high-security organizations anymore.



Fingerprint Identification Technology is currently supported only on Compaq iPAQ PCs with the Legacy Module installed, not on iPAQ legacy free models.

See www.compaq.com/im/fit/index.html for more information.

Fault Notification and Recovery

Fault Notification and Recovery features combine innovative hardware and software technology to prevent the loss of critical data and minimize unplanned downtime.

When a fault occurs, the Personal Computer displays a Local Alert message containing a description of the fault and any recommended actions. You can then view current system health by using the Compaq Management Agent. If the Personal Computer is connected to a network managed by Compaq Insight Manager LC, Compaq Insight Manager or other management products from Compaq Management Solutions Partners, the Personal Computer also sends a fault notice to the network management application.

Celeron and Pentium III Fault Prediction and Prefailure Warranty

When the processor encounters an excessive number of error checking and correcting (ECC) cache memory errors, the Personal Computer displays a Local Alert message. This message contains detailed information about the faulty processor, allowing you to take action before you experience non-correctable cache memory errors. The Prefailure Warranty allows you to replace these processors, free of charge, before they actually fail.

SMART Hard Drive Fault Prediction



SMART hard drive fault prediction and Prefailure Warranty apply only to internal hard drives, not to MultiBay drives.

The SMART hard drive monitors hard drive activity to predict failures and, in some cases, fix faults before failures occur. Fault prediction and failure indication parameters, such as abnormal variations in spinup and seek times, or non-correctable read and write errors, are tracked to determine the hard drive condition. Should these errors become significant, the Personal Computer displays a warning message. The warning gives you time to back up the hard drive and replace it prior to experiencing downtime or loss of data.

The Prefailure Warranty for SMART hard drives allows you to replace these drives, free of charge, before the drives fail.

SMART hard drives are compliant with the Small Form Factor Committee Specification for Self-Monitoring, Analysis, and Reporting Technology (SMART). SMART is the industry standard technology, pioneered by Compaq and originally called IntelliSafe, that allows you to prevent data loss and minimize downtime, in concert with Compaq Management Agents.

Introducing the Drive Protection System

The Compaq Drive Protection System (DPS) is a diagnostic tool built into the internal hard drive. DPS is designed to help diagnose problems that might result in unwarranted hard drive replacement.

When Compaq personal computers are built, each installed hard drive is tested using DPS and a permanent record of key information is written onto the drive. Each time DPS is run, test results are written to the hard drive. Your service provider can use this information to help diagnose conditions that caused you to run the DPS software. Refer to the *Troubleshooting Guide* for instructions on using DPS.

Ultra ATA Integrity Monitoring

Ultra ATA Integrity Monitoring monitors the integrity of data as it is transferred between an Ultra ATA hard drive and the system's core logic. If the Personal Computer detects an abnormal number of transmission errors, the Personal Computer displays a Local Alert message with recommended actions. An alert is also sent over the network to the system administrator.

Surge-Tolerant Power Supply

An integrated surge-tolerant power supply provides greater reliability when the Personal Computer is hit with an unpredictable power surge. This power supply is rated to withstand a power surge of up to 2000 volts without incurring any system downtime or data loss.

Software Updating and Management

Compaq provides several tools for managing and updating software on Compaq Personal Computers-Altiris eXpress, Insight Manager LC, System Software Manager, and Remote Management Setup Utilities.

Using Insight Manager LC, you can also monitor a workgroup of PCs from a central console and remotely update the system software, including flash ROM or hardware device drivers, for each of the managed PCs individually.

System Software Manager (SSM) is a utility that lets you update system-level software on multiple systems simultaneously. When executed on a PC client system, SSM detects both hardware and software versions, then updates the appropriate software from a file store. Support software that works with SSM is flagged with the PC Lifecycle Management icon on the Compaq Web site. To download the utility or to obtain more information on SSM, visit the Compaq Web site at www.compaq.com/im.

In addition to its PC configuration capabilities mentioned in a previous section, Altiris eXpress also includes easy to use software distribution capabilities. You can use Altiris eXpress to update operating systems and application software from a central console. When used in conjunction with SSM, Altiris eXpress can also update ROM BIOS and device driver software.

Finally, the Compaq Remote Management Setup Utilities, when integrated with Management Solutions Partners products, deliver an on-going management solution. These utilities supplement the capabilities of Solutions Partners products for distributing new applications, device drivers, and other system software. The Compaq Web site include updated ROM images and device drivers which can be distributed to client PCs using these software tools.

For more information, refer to the online *Remote Management Administrators Guide*. The *Remote Management Administrators Guide* is included with the Remote Management Setup Utilities, which are available on the Compaq Web site at www.compaq.com/support/files/index.html. The following sections provide information on using these utilities to accomplish various remote management functions including ROM flash, changing security settings, and wakeup/shutdown.

Remote ROM Flash

Your Personal Computer comes with reprogrammable flash ROM (read only memory). By establishing a setup password in Security Management, you can protect the ROM from being unintentionally updated or overwritten. This is important to ensure the operating integrity of the Personal Computer. Should you need or want to upgrade your ROM, you may:

- Order an upgraded ROMPaq diskette from Compaq.
- Download the latest ROMPaq images from the Compaq World Wide Web site (www.compaq.com).



CAUTION: For maximum ROM protection, be sure to establish a setup password. The setup password prevents unauthorized ROM upgrades. Compaq Insight Manager LC allows the system administrator to set the setup password on one or more PCs simultaneously. For more information, visit the Compaq Web site at www.compaq.com.

Using Remote ROM Flash

Remote ROM Flash allows the system administrator to safely upgrade the ROM on remote Compaq personal computers, directly from the centralized network management console. Enabling the system administrator to perform this task remotely, on multiple computers and Personal Computers, results in a consistent deployment of and greater control over Compaq iPAQ ROM images over the network. It also results in greater productivity and lower total cost of ownership.

All Compaq iPAQ ROMPaq ROM images from Compaq are digitally signed to ensure authenticity and minimize potential corruption.



The Personal Computer must be powered on, or turned on through Remote Wakeup, to take advantage of Remote ROM Flash. Use of Remote ROM Flash also requires an established setup password.

For more information on enabling Remote ROM Flash, refer to the online *Remote Management Administrators Guide*. The *Remote Management Administrators Guide* is included with the Remote Management Setup Utilities, and is available on the Compaq Web site at www.compaq.com.

Remote Security Management

Remote Security Management allows the system administrator to safely set or modify security features on remote Compaq personal computers, directly from the centralized network management console. Enabling the system administrator to perform these tasks remotely, on multiple computers, results in consistent deployment of and greater control over PC security parameters over the network. It also results in greater productivity and lower total cost of ownership.



The Personal Computer must be powered on, or turned on through Remote Wakeup, to take advantage of Remote Security Management. Use of Remote Security Management also requires an established setup password.

For more information about the Remote Management Setup software and enabling Remote Security Management, refer to the online *Remote Management Administrators Guide*. The *Remote Management Administrators Guide* is included with the Remote Management Setup Utilities, and is available on the Compaq Web site at www.compaq.com.

Remote Wakeup and Remote Shutdown

The personal computer features an integrated network interface card that supports the Compaq Remote Wakeup and Remote Shutdown functions. These functions allow a system administrator to power on and power off the PC from a remote location, supported by PC LAN management tools.



Third-party software tools are required to remotely distribute software.

Remote Wakeup allows the network interface controller to continue functioning, even when power to the personal computer has been turned off.



The Personal Computer continues to consume a small amount of electricity even after you turn it off. Only when you disconnect the power cord from the electrical outlet does the Personal Computer stop consuming electricity.

To enable Remote Wakeup and Remote Shutdown, complete the following steps:

1. Double-click the Network Icon, located in the Control Panel.
2. Double-click the appropriate network controller.
3. Click the Advanced Properties tab.

4. Select Remote Wakeup.
5. Change the value to ON.
6. Click OK to save and apply changes, then click OK to exit the Network dialog.

For more information on using Remote Wakeup and Remote Shutdown, refer to the online *Remote Management Administrators Guide*. The *Remote Management Administrators Guide* is included with the Remote Management Setup Utilities, and is available on the Compaq Web site at www.compaq.com.

NIC-Based Alerts

NIC-based alert support allows a system administrator to remotely monitor personal computers and Personal Computers over the network. The Personal Computer can send hardware and operating system failure alerts over the network before the operating system is loaded or when the Personal Computer is powered off. Alerts may include:

- system BIOS hang
- operating system hang
- processor missing
- operating temperature exceeded

Replicating Your Setup

This procedure gives an administrator the ability to easily copy one setup configuration to other Personal Computers of the same model. This allows for faster, more consistent configuration of multiple Personal Computers. To replicate your setup:

1. Access the Computer Setup Utilities menu.
2. Click File > Save to Diskette. Follow the instructions on the screen.



This requires a MultiBay LS-120 drive or a portable, external diskette drive.

3. To replicate the configuration, click File > Restore from Diskette, and follow the instructions on the screen.

Altiris eXpress and PC Transplant make it easy to replicate the configuration and custom settings of one PC and copy it to one or more PCs. For more information, visit the Compaq Web site at www.compaq.com.

Dual-State Power Button

With Advanced Power Management (APM) enabled in Windows 98 or Advanced Configuration and Power Interface (ACPI) enabled for Windows 98 and Windows 2000, the power button can function either as an on/off switch or as a suspend button. The suspend feature does not turn off power altogether, but instead causes the Personal Computer to enter a low-power standby. This allows you to quickly power down without closing applications and to quickly return to the same operational state without any data loss.

To change the power button's configuration, complete the following steps:

1. Access the Computer Setup menu.
2. Select Power > Energy Saver. Select Minimal or Advanced to turn on the Energy Saver Options menu.
3. Select Power > Energy Saver Options. Set the power button configuration to either On/Off or Suspend/Wakeup, as desired.

Refer to the *Troubleshooting Guide* for more detailed information about the features of Computer Setup.

4. Select File > Save Changes and Exit.

After configuring the power button to function as a suspend button, press the power button to put the system in a very low power state (suspend). Press the button again to quickly bring the system out of suspend to full power status. To completely turn off all power to the system, press and hold the power button for four seconds.



If you have selected the "Blink LED during Energy Save" option in Computer Setup, the power-on light will blink green once every two seconds while the Personal Computer is in suspend. Refer to the *Troubleshooting Guide* for more information on using Computer Setup.

Power Management

Power Management is a feature that saves energy by shutting down certain components of the Personal Computer when they are not in use, saving energy without having to shut down the Personal Computer. Timeouts (the period of inactivity allowed before shutting down these components) can be enabled, customized, or disabled using Computer Setup.

1. Access the Computer Setup menu.
2. Select Power > Energy Saver. Select Advanced to turn on the Timeouts menu.
3. Select Power > Timeouts. Enable, customize, or disable timeouts.

Refer to the *Troubleshooting Guide* for more detailed information about the features of Computer Setup.

4. Select File > Save Changes and Exit.



To avoid potential conflicts, never enable monitor timeouts in Windows 95 or Windows 98 while system timeouts are enabled in Computer Setup.

Use Display Properties to establish, modify, or disable Power Management settings for the monitor. To access Display Properties, right-click on the Windows Desktop, then choose Properties.

World Wide Web Site

Compaq engineers rigorously test and debug software developed by Compaq and third-party suppliers, and develop operating-system specific support software, to ensure the highest level of performance, compatibility, and reliability for Compaq Personal Computers.

When making the transition to new or revised operating systems, it is important to implement the support software designed for that operating system. If you plan to run a version of Microsoft Windows or Microsoft Windows NT Workstation that is different from the version included with your Personal Computer, you must install corresponding Compaq device drivers and utilities to ensure all features are supported and functioning properly.

Compaq has made the task of locating, accessing, evaluating, and installing the latest support software easier. You can download the software from the Compaq World Wide Web site at www.compaq.com.

The Web site contains the latest device drivers, utilities, and flashable ROM images needed to run Windows 98, Windows Millenium, Windows 2000, and Windows NT Workstation on your Compaq commercial desktop product.



If you call Compaq to place an order, be sure to have the serial number of your Personal Computer available. For the location of the serial number, refer to *Quick Setup*, "Step 2: Identify Rear Panel Components and Confirm Voltage Setting." This number is necessary for all purchases.

Building Blocks and Partners

Compaq management solutions are based on industry standards, including DMI 2.0, Web-Based Enterprise Management, Intel's "Wired for Management," SNMP, and Net PC technologies. Microsoft, Intel, Hewlett-Packard, Novell, Seagate, and other industry leaders work closely with Compaq to integrate their management solutions with Compaq products and initiatives, giving you, the Compaq customer, extraordinary flexibility and functionality in client management and PC ownership cost reduction.

Desktop Management Interface (DMI)

The Desktop Management Task Force (DMTF) is an industry body created in 1992 with the goal of standardizing systems manageability. DMTF established the Desktop Management Interface (DMI) framework to standardize access to PC configuration data. Compaq, as a Steering Committee and Technical Committee member of the DMTF, delivers hardware and software instrumentation that supports the DMI standard.

For more information on configuring the DMI software, refer to the online *Intelligent Manageability Guide*.

Wired for Management

Intel's Wired for Management initiative is focused on reducing the support and administration cost of Intel architecture-based systems without compromising their flexibility and performance. The Wired for Management guidelines provide a baseline set of building blocks that Compaq utilizes in Intelligent Manageability to provide standardized management of desktop inventories, remote system configuration, off-hours maintenance, and next

generation power management. But Compaq doesn't stop with these baseline features. Additional capabilities have been incorporated into Intelligent Manageability to provide an extensive solution for managing networked computing environments.

Wired for Management technologies include:

- Desktop Management Interface (DMI) 2.0
- Remote System Installation
- Remote Wakeup and Remote Shutdown
- ACPI-Ready Hardware

Compaq Management Solutions Partners Program

Compaq delivers desktop management solutions through the Compaq Management Solutions Partners Program. This Compaq initiative ensures compatibility and integration of AssetControl features with leading PC LAN and enterprise management products. These products provide remote access to the AssetControl features so that LAN and PC administrators can manage the Compaq Family of Personal Computers information from a central location. The partnership ensures that the benefits of Intelligent Manageability are accessible through a broad range of vendors. This allows customers to use their tools of choice to remotely manage their Compaq computers and Personal Computers more confidently and cost effectively. For more information and a list of Compaq Management Solutions Partners and their products, visit www.compaq.com/im/partners/index.html on the Compaq Web site.

chapter 7

For More Information

Using the *Compaq iPAQ Reference Library* CD



Refer to the *Compaq iPAQ Reference Library* CD for additional product documentation. Books on the CD include:

- Quick Setup & User's Guide (this book, in PDF Format)
- Safety & Regulatory Information (PDF Format)
- Troubleshooting (PDF Format)
- Safety & Comfort Guide (Windows Help format)



If you do not have a CD-ROM drive, you may download the product documentation from the Compaq Web site at www.compaq.com/support.

Insert the compact disc into the CD-ROM drive. There may be a slight delay while the software checks the Windows Regional Settings. A menu of the books available on the compact disc is automatically displayed.

Click the title of the book you want to read. The first time you click a link to a book provided on CD in Adobe PDF format, you may be prompted to install the Adobe Acrobat Reader software, which is also provided for you on the CD. Read and follow the prompts to install Acrobat Reader.



The menu and books are displayed in the language chosen during initial system setup or specified later in your Windows Regional Settings. If the Regional Settings do not match one of the languages supported on the CD, the menu and books are displayed in English.

If there is no CD-ROM drive activity for two minutes or more, it may be because Autorun is not enabled on the system. To run the *Compaq iPAQ Reference Library* CD if it does **not** run automatically:

1. Click Start>Run.
2. Type

X:\CompaqiPAQ.exe

(where X is the drive letter designator for the CD-ROM drive)

3. Click OK.

appendix **A**

Specifications

Compaq iPAQ Desktop Personal Computer

Desktop Dimensions

Height	11.8 in	30.0 cm
Width	5.7 in	14.4 cm
Depth	9.4 in	24.0 cm

Approximate Weight	10.7 lb	4.8 kg
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Temperature Range (values subject to change with increasing altitude)

Operating	50* to 95°F	10* to 35°C
Nonoperating	-22* to 140°F	-30* to 60°C

Relative Humidity (noncondensing)

Operating (28°C max wet bulb)	10-90%	8-90%
Nonoperating (38.7°C max wet bulb)	5-95%	5-95%

Mechanical Shock (11ms 1/2 sine shock pulse)

Operating	5 G's	5 G's
Nonoperating	20 G's	20 G's

Vibration (random, G's nominal)

Operating (10 to 300 hz)	.25	.25
Nonoperating (10 to 500 hz)	.50	.50

Maximum Altitude (unpressurized)

Operating	10,000 ft.	3048 m
Nonoperating	30,000 ft.	9144 m

Power Supply

Operating Voltage Range	90-132 VAC	180-264 VAC
Rated Voltage Range	100-127 VAC	200-240 VAC
Rated Line Frequency	50-60 Hz	50-60 Hz

Power Output	90 W	90 W
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Compaq iPAQ Desktop Personal Computer *(Continued)*

Rated Input Current (maximum)	2.5 A	1.25 A
Power Dissipation		
Maximum	400 BTU/hr.	117 watts
Typical	70 BTU/hr.	50 watts

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